Conflict and Child Labor: Evidence from Poor Households in Colombia

Claudia Sofia del Risco Bravo

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Abstract

Colombia suffers from one of the longest civil conflicts in the world, which is believed to have had several consequences on the country's economic and development performance. This study uses measures of central government deterrence effort as instruments of conflict to estimate the impact of conflict on children's time allocation to two different types of work: housework and work performed outside the household for poor families living in small municipalities in Colombia. I find that children living in highly affected by conflict municipalities are more likely to do some kind of work, specially outside the household. Moreover, housework intensity is significantly higher for girls living in this kind of municipalities.
[1]

1 Introduction

The social, economic and political consequences of violent conflict are tremendous. It can destroy infrastructure and capital; it displaces people, endangers civil liberties, disrupts schooling, and affects health (Justino 2011). Therefore, conflict is likely to change households' decisions in several aspects such as labor allocation and human capital accumulation. The later is a fundamental mechanism through which conflict can affect long-term development and economic growth. Human capital destruction during childhood is a well documented mechanism leading to poverty traps, due to the severe long-run effects it can have on individual and household welfare via future labor market outcomes and economic performance of the affected children (Becker 1962, Mincer 1974, Shultz 1961). Negative effects of violent conflict on individual and household's education level, labor and health outcomes can be observed decades after the conflict ended (Alderman et al. 2006, Akresh et al. 2009, Shemyakina 2011).

Schooling and child labor are usually the two options between which parents allocate their children's time. Although they are not necessarily exclusive, there may still be substantial consequences of work for schooling attainment and performance. Several studies have found a negative correlation between working and grade advancement, years of completed education and test scores for Latin America (Orazem and Gunnarsson 2004,

[1] L'université de Paris 1 Panthéon Sorbonne n'entend donner aucune approbation, ni désapprobation aux opinions émises dans ce mémoire; elles doivent être considérées comme propre à leur auteur.

Psacharopoulos 1997). Moreover, even taking into account the endogeneity issue, there is evidence of a negative relation between child labor and school attainment (Boozer and Sari 2001, Beegle et al. 2004). Then, conflict may have and impact on both schooling and child labor decisions, if it can change households' decisions.

This study adds to the existing literature by estimating the effect of armed conflict on child labor for poor households in Colombia. To do so, I use two panel data sets that allow me to link household's time allocation decisions with armed conflict intensity at the municipality level. The identification strategy is the variation of conflict exposure both across time and space. I estimate both the effect of conflict on the probability for a child to work and the impact of conflict on the intensity of child labor, distinguishing between two types of child labor: housework and work performed outside the household.

I use three different approaches to estimate the causal link between conflict and child labor. The first one estimates the probability of working by using a dummy that distinguishes between highly affected by conflict municipalities and those less affected. The second one exploits the panel structure by estimating an individual fixed effects model. To control for possible endogeneity[2], the third and preferred strategy estimates the two previous models instrumenting conflict with lagged central government deterrence measures. Under this last approach, I find that conflict increases the likelihood but not the intensity of child labor. For housework, conflict significantly increases both the likelihood and the amount of time children, especially girls, dedicate to it. Finally, conflict increases the likelihood child work outside the household but not the intensity of this type of job; moreover the magnitude of this effect is greater for boys than for girls.

The rest of this document is divided as follows: Section 2 presents a brief literature review, Section 3 explains the data, Section 4 gives the results, and Section 5 concludes.

2 Literature review

There are three main channels through which conflict can affect child labor: indirectly by creating negative income shocks, and changing returns to education, and directly through soldiering.

Low household income levels have been seen as a determinant of child labor ever since the seminal theoretical paper of Basu and Hoang Van (1998). This model shows that child labor can occur assuming altruistic parents if household income is lower than a subsistence level, i.e. children are used as an economic security mechanism, as reported in the development economics literature (Dasgupta 1993, Nugent and Gillaspy 1983). There is empirical evidence relating negative income shocks to increases in child labor (Beegle et al. 2006, Duryea et al 2007, Jacoby and Skoufias 1997, Thomas et al. 2004). Now, there are at least three ways in which conflict can create negative income shocks: lost of property or increased probability of loosing property[3], job loss[4], and changes in family

[2]HRW more than 11000 children were fighting in Colombia's armed conflict by 2003. Also, there is the possibility of families self-selecting themselves into specific types of municipalities (on conflict) depending on their risk taking preferences.

[3]For example, guerrilla and paramilitary groups use to charge a "security tax" to vast populations depending on specific characteristics.

[4]Camacho and Rodriguez (2010) find that a one standard deviation in the number of guerrilla and paramilitary attacks in a municipality increases the probability of firm exit in 8.1 percentage points.

structure.[5]

Conflict can also change returns to education, affecting households' child labor decisions through three channels. First, education is a risky investment (Becker 1964, Levhari and Weiss 1974) because of future labor markets uncertainty and the likelihood of young adult death. Estevan and Baland (2007) develop a theoretical model that shows how high young adult mortality rates can lead to inefficiently high levels of child labor due to uncertainty of education's returns. Loretzen et al. (2005) find that increases in life expectancy are associated with higher human capital investments. Since conflict affects mortality rates, it also increases this uncertainty. Second, conflict can reduce the quality of education by creating an unsafe environment for teachers and students leading to low school attendance rates, and destroying infrastructure. Finally, conflict is believed to affect economic performance in general, which can reduce labor opportunities for educated workers.

Although there are some cross-country studies on the consequences of violent conflict with mixed findings (Chen et. al 2007, Collier 1999, Stewart and Fitzgerald 2001), this country-level perspective has been criticized because of its insufficient attention to the impact of armed conflict on households and individuals (Verwimp, Justino and Brück 2009). Using micro-level data for Tajikistan, Shemyakina (2011) finds that the probability of completing mandatory schooling was significantly reduced for women. Akresh and de Walque (2008) investigates the impact of the 1994 Rwanda genocide on schooling outcomes of children, using a difference in differences approach they find that children exposed to the genocide experience a decline in school attendance and are less likely to complete fourth grade.

For Colombia, Angrist and Kugler (2008) find that boys labor supply increased due to the shift of production of coca paste from Bolivia and Peru to Colombia. Dueñas and Sanchez (2007) find that the activities of illegal armed groups increase the risk of dropout for all individuals, and this effect is stronger for the poorest households. Rodriguez and Sánchez (2011) show that conflict induces children to drop out and to enter the labor market too early. Barrera and Ibañez (2004) find a negative relationship between the probability of school enrollment and contemporaneous homicide rate. However interesting these results are, these studies use cross-section data, which has the usual limitations. Moreover, the present study also differs from the previous ones because it studies the effect of conflict on tow different types of child labor, housework and work performed outside the household.

3 Data

I use two different panel data sets for this study. The one for Conflict is unique a daily dataset from 1994 to 2012, and the one for Child Labor comes from a social program intended for poor households in small municipalities[6].

[5]Death or displacement of some relatives may induce an "added worker effect". It can be directly, increasing child labor supply in the market, or indirectly, increasing child housework. Justino (2011) points out that households in conflict affected countries tend to replace dead, injured or physically and mentally disabled adult workers with children, in order to compensate for income unexpected reductions.

[6]Population not larger than 100000 inhabitants by 2002

3.1 Household Data

This data comes from *Familias en Accion*[7], a social program implemented in Colombia in 2002. This data set offers information about families characteristichs, decision process and expectations, which allows getting insights about child labor decisions. The household survey data coming from the Familias en Acción dataset includes information on 57,764 individuals living in 9,526 poor households in 122 municipalities. Although the surveys were designed mainly to evaluate the program, they collected information on household living arrangements, economic conditions (income, assets, transfers to and from the household, detailed family expenditures, external shocks and how the family responded financially to these shocks). For individuals 10 and older, there is rich information on education and employment history, type and amount of payments, work arrangements and conditions, time allocation per day, and expected and desired years of schooling.

To be eligible for the program, households had to live in an eligible municipality. Those municipalities were required to have at most 100000 inhabitants by 2002, access to health services and basic education, a bank, and not be in the coffee zone. Within each municipality, households registered with SISBEN (System for the Selection of Beneficiaries of Social Programs) were eligible[8]. A random and stratified selection of 55 treated municipalities and 67 control municipalities, matched on geographic location, population, and indices of quality of life, and school and health structure availability.[9] Therefore, it is feasible to assume that child labor trends would have been parallels had all municipalities been equally affected by conflict.

I focus on the time use data on children between 10 and 17 years old. The sample consists of 15314 children in 2002, 15198 in 2003, and 14102 in 2005. Around 53.2% of the children are boys, 47.9% live in a rural area, 81.9% have at least one younger child living in the same household, 82.5% of them live in a household whose head has some kind of paid job, and live in a household with 2.77 adults on average.

The child labor variables used come from the time use data in this database. There are two types of variables: dummy ones for whether a child works or not (for both the two different types of child labor, and their sum)[10], and the intensity variables measured as the number of minutes dedicated to each type or work on the last business day.

Table 1 shows household and municipality controls descriptive statistics. On average 58.1% of the children between 10 and 17 years old do some kind work, 54.4% do more housework than the median and 14.3%[11] do more work outside the household than the median. Moreover, children work, on average, around 121 minutes a day, 70.9 minutes of housework and 51.16 of work outside the household but there is a considerable variation

[7]Families in the program were given subsidies, conditional upon nutrition and health check-ups for children younger than 7 years old, and gives incentives for children to go to elementary school.

[8]Since these are poor households, this database provides a perfect setting for this study, since the channels through which conflict can affect child labor suggested by the literature work almost exclusively for this type of households that can not afford to migrate or take any other alternative to mitigate the consequences of conflict.

[9]Most of the control municipalities were towns without a bank, hence they were not eligible for the program's first wave.

[10]A child is said to work if he or she dedicates more time than the median for each type of work.

[11]This low percentage is probably due to the fact that families might underreport this type of work more than housework, since it can be perceived as more harmful.

(a standard deviation of 164.32, 104.672, and 143.84 respectively). The reminder of the table shows both household[12] and municipality controls[13] such as: age, sex, number of adults in the household, a dummy for the presence of younger children, a dummy for the employment status of the head of the household, a dummy for urban households, municipality area, altitude, rainfall, population, number of Courts, number of Prosecutor Offices, number of Attorneys Office, and an Erosion index.

Attrition is a concern for this database. Contact rate was 93.8% of the initial sample for the first follow-up, and 83% for the second follow-up. This can cause problems if conflict is related to this sample lost, more specifically if households living in highly affected by conflict municipalities decided to migrate because of conflict.[14] However, since more risk averse households are more prone to both child labor and migrating due to conflict, the estimates presented in this study can be seen as a lower bound of the actual impact of conflict on child labor.

3.2 Conflict Data

Colombia has experienced one of the longest internal conflicts in the world. It began by the creation of two left wing guerrilla groups in the 1960s, the Revolutionary Armed Forces of Colombia (FARC) and the National Liberation Army (ELN) (Guigale et al. 2002). Landowners and drug lords started right wing paramilitary groups, United Self-Defense Forces of Colombia (AUC), to protect themselves against these groups. By the second half of the 1980s violence related to the narcotics business had increased. The guerrilla became involved in this business as well, which intensified the ongoing conflict (Harker and Meléndez 2008). Both guerrilla and paramilitary groups have committed all kinds of violent attacks against the state armed forces, national infrastructure, and the civil population through kidnappings, population displacement, forced recruitment and homicides (Rodríguez and Sánchez 2012).

Álvaro Uribe was elected president of Colombia in 2002. "Democratic Security", his most popular policy, aimed to regain state control over the country's territory. In order to achieve this goal, military spending increased, expanding police presence to all municipalities, trying to eradicate coca cultivation, fighting the guerrilla and demobilizing the AUC. This policy had mixed results, even though the number of kidnappings and homicides decreased significantly, some of the AUC members formed the so-called *bandas criminales* continue to participate in drug production and trafficking and attack civil population.

The data set used in this study comes from a balanced panel of detailed event-based data from the Center for the Study for Armed Conflict (CERAC), updated by Universidad del Rosario. For every event the conflict dataset records its type, the date, location,

[12] Older children, with younger relatives within the household, living in rural areas with unemployed head of the household are expected to be more likely to work. Moreover, the more adults a household has, the less it should need extra work supply, ceteris paribus. Finally, a dummy for the head of the household having at least some secondary education is also added, since the literature suggests this to be an important determinant of the amount of education parents want for their children.

[13] Covariates to estimate conflict suggested by the literature on Colombia.

[14] A first approach shows that conflict seems to decrease the likelihood of a household being found both in 2003 and 2005.

perpetrator, and victims involved in the incident[15]from 1988 to 2012. Instruments are taken from the Center of the Studies for Economic Development (CEDE) at Universidad de los Andes.

Table 2 reports the descriptive statistics of the conflict variables and the instruments for municipalities present in the household database. The measure of conflict used in this study is a dummy variable that activates when the attack rate per 100000 inhabitants in a each municipality is at least the median of the hole sample for a given year[16]. Specifically, the total number of attacks is the sum of political terrorist attacks, illegal road blockings, route blocking, explosive terrorist attacks, arsonist terrorist attacks, private property assaults, entity terrorist attacks, armed contact, ambushes, harassing, population incursions, land piracy, and other terrorist attacks. Table 2 shows that there is enough variation of conflict measures both within municipalities thought time.

The instruments used in this study are measures of central government deterrence effort: weapons seized and laboratories dismantle[17]. These have been suggested by the literature[18] on Colombian conflict as being strongly correlated with conflict measures such as number of attacks. This also holds for the database used in this study, first stage results are analyzed in the next section. Intuitively, these two variables should be strongly and positively correlated with conflict variables because they indicate the presence and effectiveness of the central government to neutralize illegal armed groups' actions. Moreover, these instruments are believed to be exogenous to child labor, as it's unlikely that households decide their time use based on these central government decisions, which are usually classified and take place in environments not easily detected by the civil population. Likewise, most schooling policies are decided at the regional level, and even those determined at the country level, are not taken by the same ministry than those of deterrence effort, hence households' decisions are not likely to be affected by the instruments through any other channel than conflict.

4 Results

As mentioned above, this study uses three different approaches to estimate the effect of conflict on both the parent's decisions to make their children[19] work and the amount of time they do so (measured by number of minutes children dedicate to work in a given day), differentiating the effects by gender, and by two types of work.

Given that this panel comes from a social program intended to improve health status of the children in the household and to give incentives for parents to send their children to elementary school, all regressions have as a control a dummy for the household receiving

[15]The dataset is described thoroughly by Restrepo, Spagat, and Vargas (2004).

[16]It's constructed that way due to a relatively high number of zeros of the attack rate variable.

[17]Controlling for geographical variables are included because they determine whether or not coca leaf can be produced there. Institutional variables are added as a proxy of state institutional presence. These variables are included because they are not affected by conflict.

[18]For example Camacho and Rodriguez (2010) use laboratories dismantle, and Lemus (2014) uses these two as well.

[19]Assuming parents decide their children's time allocation might not be entirely realistic, especially for older children, but given the empirical nature and the scope of this study, this assumption is not problematic.

this aid, since treated households should be more prone to send their children to school, this should decrease the likelihood of child labor.

Instrumentes are used becuase there is a possible endogeneity issue due to high participation of children in war and due to possible selection of households into more "peaceful" municipalities according to risk preferences. Table 9 presents the first stage regressions of the instrumental variable (IV) approach to check how appropriate these instruments are. Column 1 shows the results for the pooled sample using OLS, column 2 presents the first stage of the probit estimation, and the third displays the results for the 2SLS fixed effects estimation. For both specifications, both instruments significantly increase the measure of conflict. Furthermore, the F-test shows that instruments are not weak, given that all of them are greater than 10.

This section presents the results by work type, beginning with the full sample, followed by those of housework, and ending with the ones for work outside the household.

4.1 General child labor

Table 3 presents the results for labor participation decision (all types of labor). Columns (1) and (2) show the results for a linear probability model and a probit model respectively. Columns (3) and (4) display the results for the same models controlling for the endogeneity issue[20]. Children living in a highly affected by conflict municipality are more likely to do some kind of work than those living in other municipalities. Moreover, it is worth noting that the negative sign of the bias, meaning that not taking the endogeneity issue into consideration would lead one to find that conflict reduces child labor when it actually increases it. This fact might be explained by an omitted variable bias: risk aversion can affect both households' child labor/education decisions and their choices on the type of municipality (more or less conflict) to live in. As the literature[21] suggests, especially for poor households, high risk aversion induces households to use their children's' labor force as a way to reduce the risk of falling below a subsistence level of income. Hence, if more risk averse households have migrated to more peaceful municipalities, they will also be more likely to send their children to work which would explain why non-instrumented results display a negative effect of conflict on child labor that would not actually come from conflict itself but from an omitted variable, risk aversion.

Table 4 displays results for child labor intensity (as measured by the number of minutes children work in a given day). Columns (1) and (3) present the results for the pooled sample without and with instruments. Columns (2) and (4) show results for the fixed effects [22] without and with instruments.

Now, conflict does not have a significant effect on the amount of time dedicated to work when the fixed effects model is used, but it does has a significative effect for the pooled sample. Moreover, most of the coefficients lose their statistical significance when using a fixed effects specification, which means that most of the correlations captured by these variables are not actually causal effects but come from differences in municipalities'

[20] Column (3) shows the 2SLS estimation for the linear model and column (4) presents the control function estimators. The last one should be carefully interpreted since the endogenous regressor is a binary variable, hence results of column (3) are preferred.

[21] See Grootaert & Kanbur (1995), and Belzil & Leonardi (2007)

[22] Both individual and year fixed effects.

unobserved characteristics that do not vary with time, such as culture. [23] Then, not taking this problem into account can lead to misleading results, such as overestimating the effect of conflict on child labor when what's actually making the difference is something else.

Controls have the expected sign, and are usually significant in all but the 2SLS fixed effects specifications.

Once again, it is worth noting that 2SLS specifications not only make conflict's coefficients significant, but they also change their sign. This can be reflecting the endogeneity problem of conflict measures.

4.2 Housework

Table 5 shows the result of estimating the same models as table 3 but for housework decision. The same holds for tables 6 and 4, for housework intensity.

Results show that conflict significantly increases the likelihood of housework. However, this effect comes from a significanty high increase of this type of work for girls but not for boys. Both the number of adults and living in an urban area significantly reduce the likelihood oh housework. Having at least one younger relative living in the same household increases the likelihood of housework, and children living in a household with a relatively high educated head are less likely to do housework.

Children living in municipalities with high indices of conflict do 189 additional minutes of housework on average than those in towns with less conflict. This effect seems to come enterely from the female population, boys living in highly affected by conflict municipalities do significantly less housework.

These increases in both the likelihood and intensity of housework for girls may be due to the fact that conflict forces older women in the household to find a paying job, hence girls replace them in their previous duties.

It should also be noted that even if head of the household's education significantly reduces both the likelihood and intensity of housework, its effect seems to be quite low, which may be due to the fact that the populations targeted for the social program from which these data comes from are very poor households and only 13.3% of them had at least some secondary education.

4.3 Work outside the household

Tables 7 and 8 present the results for the same models as tables 3 and 4 with work outside the household as a dependent variable.

Conflict seems to increase the likelihood of a child doing this type of work by 32.8%, and this result seems to be stronger for males.

The intensity of this type of child labor increases in the instrumented pooled sample model, but this result is no longer significative when adding fixed effects. This shows once again, the importance of being able to follow the same individuals over time. Moreover, the fact that the likelihood does increase but the intensity does not could be showing that

[23] Different societies can have different points of view regarding child labor. For example, some might value formal education more than others.

households affected by conflict would have not need to nor want to send their children to work but were forced to do so because of conflict.

Furthermore, it should be noted that even though both females and males are more likely to work outside the house if they live in municipalities with a high amount of conflict, the result is stroger for boys though not significative.

5 Conclusion

Colombia has one of the longest ongoing civil conflicts in the world. Moreover, this phenomenon has been well documented, the panel of conflict at the municipality level has detailed information which combined with a panel from a social program for poor families allows to study the effect of conflict on child labor. Using an instrumental variable approach to account for possible endogeneity of conflict measures, I find that conflict increases the likelihood of child labor participation, and the intensity of housework. Furthermore, the intensity of child labor and housework significantly increases due to conflict, especially for girls. On the other hand, conflict also increases out of the household work participation, but this time the effect is higher for boys than for girls.

The present study goes one step forward from previous studies in two ways: by differentiating between housework and out of the household work, and by exploiting the panel setting of the database. I find that conflict increases the likelihood of child labor. This comes mainly through increases in children working outside the household, and affects more males than females. Conflict also increases the probability of housework and the amount of this type of work girls do. Moreover, having at least one younger relative in the same household increases the probability of housework, especially for girls, and the likelihood of work outside the household, especially for boys. These gender differences are consistent with the traditional sex roles in Colombia.

These results contribute to the understanding of the consequences of conflict on households' decisions, showing that there is yet another negative effect of this issue that should be taken into consideration when estimating the social cost of conflict and the possible gains from the end of it. They can also enrich the knowledge of governments to help them design suitable policies to reduce the negative impacts of conflict on poor households, and hence on economic development.

This is a relatively new research question and therefore further research, both theoretical and empirical, is needed to understand the effect of conflict on child labor and the channels through which it acts. Moreover, it would be interesting to find better instruments and to address the possible attrition problem that could be making the present results underestimate the effect of conflict on child labor.

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6 Annex

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Median	q75	Min	Max
Child Labor	43982	111.334	145.623	60	150	0	600
Child Labor°	43982	0.576					
Housework	43922	68.617	96.232	30	120	0	600
Housework°	43922	0.560					
Work outside house	43942	42.717	126.083	0	0	0	600
Work outside house°	43942	0.129					
Attack rate	43982	3.741	8.657	0	3.732	0	73.752
Conflict°	43982	0.257					
Youch°	43982	0.821					
Urbr°	44561	0.485					
Head hh education°	43982	0.133					
HH head employment status°	43982	0.823					
Sex°	43982	0.536					
# Adults	43982	2.777	1.377	2	3	0	19
Age	43982	13.234	2.227	13	15	10	17
Area (km)	43821	739.372	1317.433	418	847	49	12114
Altitude	43821	632.336	770.536	180	1171	3	2746
Population	43821	28323.590	21801.540	22041	34809	1519	101987
Courts	43821	1.984	2.307	1	2	0	13
Prosecutor Office	43821	0.100	0.383	0	0	0	2
N_Attorneys Office	43821	1.359	2.248	0	2	0	13
Erosion	43821	1.802	0.852	1.710	2.39	0	5
Rainfall	43821	1688.771	882.834	1398	1980	300	4997
Weapons seized	43982	0.378	0.956	0	0	0	9
Laboratories dismantled	43982	0.425	1.857	0	0	0	21

°Dummy variables. *Source: IGAC, Geographic Institute Agustin Codazzi, DANE, DNP, Superior Court of the Judiciary*

Table 2: Descriptive Statistics Conflict

			Attack rate per 100000 inhabitants		Conflict dummy		Weapons seized		Laboratories dismantle	
Year	*Municipalities*	*Individuals*	*Mean*	*Std. Dev*	*Mean*	*Std. Dev*	*Mean*	*Std. Dev*	*Mean*	*Std. Dev*
2002	122	15101	4.05889	8.13039	0.271	0.4445	0.2561	0.7316	0.67449	1.8974
2003	122	15038	3.58647	9.7782	0.2442	0.4296	0.4402	1.0495	0.678	2.362
2005	122	13843	3.10049	7.06793	0.2119	0.4087	0.3738	0.9509	0.20552	0.6801

Source: Departamento Nacional de Planeación, CEDE, CERAC/UROSARIO

Table 3: Effect of conflcit on child labor decision

			IV	
	(1)	(2)	(3)	(4)
Conflict	-0.016**	-0.046**	0.125***	0.366***
	[0.008]	[0.021]	[0.034]	[0.104]
Age	0.033***	0.088***	0.033***	0.086***
	[0.001]	[0.003]	[0.001]	[0.003]
youch°	0.044***	0.116***	0.042***	0.110***
	[0.006]	[0.016]	[0.006]	[0.016]
Head hh education°	-0.054***	-0.143***	-0.055***	-0.143***
	[0.007]	[0.019]	[0.007]	[0.019]
ad_labor°	0.01	0.027*	0.008	0.022
	[0.006]	[0.017]	[0.006]	[0.016]
Urbr°	-0.080***	-0.212***	-0.091***	-0.240***
	[0.005]	[0.013]	[0.005]	[0.013]
Sex°	-0.155***	-0.413***	-0.123***	-0.315***
	[0.005]	[0.014]	[0.009]	[0.029]
sex*conf°	0.006	0.02	-0.128***	-0.372***
	[0.011]	[0.029]	[0.034]	[0.104]
n_old	-0.007***	-0.020***	-0.008***	-0.020***
	[0.002]	[0.005]	[0.002]	[0.005]
Observations	42371	42371	42371	42371

Note: Robust standard errors in brakets.**p<0.05 ***p<0.01.Source: IGAC, DANE, DNP, Superior Court of the Judiciary, CEDE, CERAC/UROSARIO. Author's calculations.

Table 4: Effect of conflcit on child labor intensity

			IV	
	(1)	(2)	(3)	(4)
Conflict	-2.396	-6.932	59.630***	109.718
	[2.057]	[8.809]	[11.467]	[71.925]
Age	18.162***	-3.568	18.101***	-4.180*
	[0.324]	[3.197]	[0.329]	[2.498]
youch°	15.171***	4.357	13.699***	6.024
	[1.600]	[6.810]	[1.625]	[6.593]
Head hh education°	-16.814***		-20.874***	
	[1.724]		[1.747]	
ad_labor°	6.248***	-234.749***	5.352***	-171.604
	[1.789]	[75.960]	[1.810]	[126.864]
N_adult	-0.736	-1.155	-1.521***	-1.528
	[0.494]	[1.341]	[0.504]	[1.289]
Sex°	-32.764***		-42.521***	
	[1.414]		[1.495]	
Urbr°	-9.077***		4.368	
	[1.508]		[3.064]	
sex*conf°	6.067**	-2.251	-50.843***	-118.286
	[3.095]	[5.002]	[11.428]	[71.927]
Observations	42371	42371	42371	42371
Number of individuals		21905		21905
Fixed Effects		✓		✓

Note: Robust standard errors in brakets.**p<0.05 ***p<0.01.Source: IGAC, DANE, DNP, Superior Court of the Judiciary, CEDE, CERAC/UROSARIO. Author's calculations.

Table 5: Effect of conflcit on housework

			IV	
	(1)	(2)	(3)	(4)
Conflict	-0.008	-0.024	0.089***	0.289**
	[0.007]	[0.022]	[0.034]	[0.115]
Age	0.001	0.004	0.001	0.004
	[0.001]	[0.003]	[0.001]	[0.003]
youch°	0.015**	0.042**	0.016***	0.045***
	[0.006]	[0.017]	[0.006]	[0.017]
Head hh education°	-0.028***	-0.075***	-0.018**	-0.047**
	[0.007]	[0.019]	[0.007]	[0.019]
ad_labor°	-0.002	-0.006	-0.003	-0.008
	[0.006]	[0.017]	[0.006]	[0.017]
Urbr°	-0.033***	-0.091***	-0.025***	-0.069***
	[0.005]	[0.014]	[0.005]	[0.014]
Sex°	-0.277***	-0.727***	-0.254***	-0.645***
	[0.005]	[0.014]	[0.009]	[0.032]
sex*conf°	-0.019*	-0.046	-0.114***	-0.353***
	[0.011]	[0.029]	[0.034]	[0.114]
n_old	-0.012***	-0.031***	-0.010***	-0.026***
	[0.002]	[0.005]	[0.002]	[0.005]
Observations	42312	42312	42312	42312

Note: Robust standard errors in brakets.**p<0.05 ***p<0.01.Source: IGAC, DANE, DNP, Superior Court of the Judiciary, CEDE, CERAC/UROSARIO. Author's calculations.

Table 6: Effect of conflcit on housework intensity

			IV	
	(1)	(2)	(3)	(4)
Conflict	-0.165	-4.36	33.326***	189.256***
	[1.747]	[6.923]	[8.025]	[54.726]
Age	5.631***	-1.348	5.599***	-2.246
	[0.213]	[2.139]	[0.214]	[1.898]
youch°	3.576***	0.627	3.211***	2.814
	[1.132]	[4.253]	[1.141]	[5.016]
Head hh education°	-6.060***		-6.410***	
	[1.244]		[1.255]	
ad_labor°	2.659**	-247.233***	2.145*	-136.565
	[1.188]	[76.463]	[1.192]	[96.379]
N_adult	-1.450***	0.38	-1.579***	0.117
	[0.324]	[0.941]	[0.327]	[0.980]
Sex°	-11.871***		-14.143***	
	[0.946]		[0.999]	
Urbr°	-52.992***		-45.317***	
	[1.052]		[2.105]	
sex*conf°	-1.707	6.262	-33.668***	-186.841***
	[2.063]	[5.362]	[7.920]	[54.726]
Observations	42312	42312	42312	42312
Number of individuals		21887		21887
Fixed Effects		✓		✓

Note: Robust standard errors in brakets.**p<0.05 ***p<0.01.Source: IGAC, DANE, DNP, Superior Court of the Judiciary, CEDE, CERAC/UROSARIO. Author's calculations.

Table 7: Effect of conflcit on work outside the household

			IV	
	(1)	(2)	(3)	(4)
Conflict	-0.010**	-0.064*	0.058**	0.328**
	[0.004]	[0.034]	[0.025]	[0.154]
Age	0.030***	0.151***	0.030***	0.148***
	[0.001]	[0.004]	[0.001]	[0.004]
youch°	0.027***	0.166***	0.024***	0.150***
	[0.004]	[0.024]	[0.004]	[0.023]
Head hh education°	-0.030***	-0.208***	-0.037***	-0.242***
	[0.004]	[0.029]	[0.004]	[0.029]
ad_labor°	0.006	0.035*	0.005	0.028
	[0.004]	[0.021]	[0.004]	[0.021]
Urbr°	-0.055***	-0.279***	-0.072***	-0.366***
	[0.003]	[0.018]	[0.003]	[0.018]
Sex°	0.118***	0.638***	0.132***	0.709***
	[0.003]	[0.020]	[0.007]	[0.038]
sex*conf°	0.024***	0.123***	-0.035	-0.23
	[0.007]	[0.041]	[0.026]	[0.153]
n_old	0.002	0.007	0	0.001
	[0.001]	[0.006]	[0.001]	[0.006]
Observations	42333	42333	42333	42333

Note: Robust standard errors in brakets.**p<0.05 ***p<0.01.Source: IGAC, DANE, DNP, Superior Court of the Judiciary, CEDE, CERAC/UROSARIO. Author's calculations.

Table 8: Effect of conflcit on work outside the household intenstity

			IV	
	(1)	(2)	(3)	(4)
Conflict	-2.357*	-2.645	25.611***	-81.431
	[1.419]	[5.195]	[9.599]	[60.912]
Age	12.555***	-2.319	12.527***	-2.004
	[0.292]	[2.345]	[0.294]	[2.112]
youch°	11.572***	3.875	10.479***	3.355
	[1.300]	[5.258]	[1.308]	[5.572]
Head hh education°	-10.825***		-14.527***	
	[1.358]		[1.361]	
ad_labor°	3.548**	12.306***	3.176**	-36.215
	[1.557]	[4.209]	[1.569]	[107.242]
N_adult	0.7	-1.602	0.047	-1.698
	[0.429]	[1.067]	[0.433]	[1.090]
Sex°	-21.017***		-28.429***	
	[1.217]		[1.277]	
Urbr°	43.784***		49.433***	
	[1.286]		[2.605]	
sex*conf°	7.868***	-8.629	-16.536*	70.258
	[2.676]	[5.859]	[9.650]	[60.912]
Observations	42333	42333	42333	42333
Number of individuals		21897		21897
Fixed Effects		✓		✓

Note: Robust standard errors in brakets.**p<0.05 ***p<0.01.Source: IGAC, DANE, DNP, Superior Court of the Judiciary, CEDE, CERAC/UROSARIO. Author's calculations.

Table 9: First Stage Results

	(1)	(2)	(3)
Weapons seized	0.037***	0.036***	0.021***
	[0.002]	[0.002]	[0.004]
Laboratories dismantled	0.081***	0.084***	0.051***
	[0.006]	[0.002]	[0.007]
Observations	42371	42371	42977
F-excluded Instruments	167.07		12.14
p-value	0.000		0.000
Fixed effects			✓

*Note: Robust standard errors in brakets. **p<0.05 ***p<0.01.*
Source: IGAC, DANE, DNP, Superior Court of the Judiciary, CEDE, CERAC/UROSARIO. Author's calculations.